

Notice of Allowability

Application No.

10/088,534

Applicant(s)

ROMANET ET AL.

Examiner

Charles D. Garber

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/13/2004.
2. ☒ The allowed claim(s) is/are 1 and 3-13.
3. ☒ The drawings filed on 03/05/2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

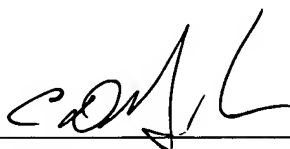
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |



EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with SCHULTZ, IRA on 9/15/04. The application has been amended as follows:

Cancel claim 2.

Change claim 1 to read:

--A method of detecting a deposit (D) having a thermally insulating nature inside a fluid transport pipe (2) through which fluid is flowing, and which comprises a pipe wall having an outside surface, the deposit thermally insulating the pipe wall from fluid being transported by the pipe, the method comprising:

applying a thermal gradient (G) to the outside surface of the pipe, the thermal gradient being transmitted substantially to the pipe wall when an insulating deposit is present; measuring the heat flux (F) on the outside surface of the pipe at a given distance from the application of the heat flux along the length of the pipe;

determining a threshold value for heat flux at the given distance indicative of the presence of an insulating deposit of predetermined thickness;

detecting when the heat flux measured at the given distance exceeds the threshold value, indicating the presence of an insulating deposit inside the pipe; and

applying a thermal gradient (G) in a determined cycle.--

Change claim 8 to read:

--An installation for detecting a deposit having a thermally insulating nature (D) inside a fluid transport pipe through which fluid is flowing, and which comprises a pipe wall and an outside surface, the deposit insulating the pipe wall from fluid flowing through the pipe, the installation comprising:

at least one source for producing a thermal gradient (G) mounted on the outside surface of the pipe, the thermal gradient being transmitted in a determined cycle and substantially to the pipe wall when the thermally insulating deposit is present;

at least one measurement sensor for measuring heat flux (F) mounted on the outside surface of the pipe situated at a given longitudinal distance from the active zone source; and

control and monitoring means connected to the production source and to the measurement sensor adapted to determine a threshold value for the heat flux at the given distance indicative of the presence of an insulating deposit of predetermined thickness inside the pipe, and to detect when the heat flux measured at the given distance exceeds a the threshold value indicative of the presence of an insulating deposit inside the pipe.—

The following is an examiner's statement of reasons for allowance:

Examiner had previously relied upon the Ludington reference (US006402369B1) to teach thermal cycling with the advantage being "more information is in a cycled source", specifically, both thermal conductively and thermal capacitance in a device

using applied heat and thermal response to characterize and differentiate biochemical products in test tubes. However, Examiner considers that such additional information would not be of obvious utility applied to determining deposits on pipeline walls to one of ordinary skill in the art. In other words, the Ludington reference is not specific enough to the particular problem. "More information" might be useful to differentiating different biochemical compounds but not obviously to levels of buildup on a pipe wall.

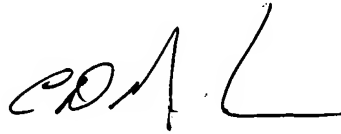
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 6:30 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdg

A handwritten signature in black ink, appearing to be 'CDM' followed by a large, stylized 'L' or a similar flourish.